## **Recovery Plan Action Status**

Plan Name: Appalachian Monkeyface Pearly Mussel (Quadrula sparsa)

Plan Status: Final Plan Date: 09-Jul-84 Lead Agency: USFWS

Lead Office Southwestern Virginia Ecological Services Field Office 623-1233)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	1	1.1	Continue to utilize existing regulations to protect species and habitat	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Region 5, Endangered Species Program, Tennessee Heritage Program, Region 5 - Law Enforcement, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries, Region 5 - Ecological Services, Region 4 - Ecological Services, Region 4 - Law Enforcement	Work type not yet selected	Labor type not yet selected	Other agencies' responsibilities would be of a cooperative nature or projects funded under a contract or grant program. In some cases contracts could be let to universities or private enterprises.
Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	3	1.2.1	Determine species' present distribution and status.	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority , Tennessee Wildlife Resources Agency , Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries	Work type not yet selected	Labor type not yet selected	Task costs have not been estimated for this plan. This species exists with other listed mussels in the same river systems. Thus, a task aimed at this species will benefit others. Rather than attempting to apportion the costs to each species, recovery tasks will be estimated at a later date when the plans are combined on a watershed basis for implementation.

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Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	2	1.2.2	Characterize habitat and determine essential elements	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority , Tennessee Wildlife Resources Agency , Region 5, Endangered Species Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries	Work type not yet selected	Labor type not yet selected	
Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	2	1.2.3	Determine the extent of preferred habitat.	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries	Work type not yet selected	Labor type not yet selected	
Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	2	1.2.4	Present information regarding the species' preferred habitat in a manner in which identifies areas in need of special attention.	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries	Work type not yet selected	Labor type not yet selected	

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Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	1	1.3.1	Determine impacts of coal industry related pollution on the species.	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority , Tennessee Wildlife Resources Agency , Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries, Region 5 - Ecological Services, Region 4 - Ecological Services	Work type not yet selected	Labor type not yet selected	
Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	1	1.3.2	Investigate and inventory factors negatively impacting the species and its environment.	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries, Region 5 - Ecological Services, Region 4 - Ecological Services	Work type not yet selected	Labor type not yet selected	

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Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	1	1.3.3	Solicit information on proposed and planned projects that may impact the species.	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries, Region 5 - Ecological Services, Region 4 - Ecological Services	Work type not yet selected	Labor type not yet selected	
Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	2	1.3.4	Determine measures needed to minimize threats and implement where needed to meet recovery	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries, Region 5 - Ecological Services, Region 4 - Ecological Services, Tennessee and Virginia Nature Conservancy	Work type not yet selected	Labor type not yet selected	

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Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	2	1.4.1	Meet with local government officials and regional and local planners to inform them of our plans to attempt recovery and request their support.	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries, Region 5 - Ecological Services, Region 4 - Ecological Services, Tennessee and Virginia Nature Conservancy	Work type not yet selected	Labor type not yet selected	
Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	2	1.4.2	Work with local, State, and Federal agencies to encourage them to utilize their authorities to protect the species and its river habitat.	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries, Region 5 - Ecological Services, Region 4 - Ecological Services, Tennessee and Virginia Nature Conservancy	Work type not yet selected	Labor type not yet selected	

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Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	2	1.4.3	Meet with local mining and industry interests and solicit their support in implementing protective actions.	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries, Region 5 - Ecological Services, Region 4 - Ecological Services, Tennessee and Virginia Nature Conservancy	Work type not yet selected	Labor type not yet selected	
Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	2	1.4.4	Meet with landowners adjacent to the species' population centers and inform them of the project and get their support in habitat protection measures.	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries, Region 5 - Ecological Services, Region 4 - Ecological Services, Tennessee and Virginia Nature Conservancy	Work type not yet selected	Labor type not yet selected	

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Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	2	1.4.5	Develop and utilize information and education program (slide/tape shows, brochures, etc.) for local distribution	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries, Region 5 - Ecological Services, Region 4 - Ecological Services, Tennessee and Virginia Nature Conservancy	Work type not yet selected	Labor type not yet selected	
Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	2	1.5	Investigate the use of Scenic River Status, mussel sanctuaries, land acquisitions, and/or other means to protect the habitat.	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries, Region 5 - Ecological Services, Region 4 - Ecological Services, Tennessee and Virginia Nature Conservancy	Work type not yet selected	Labor type not yet selected	

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Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	3	2.1	Survey rivers within the species' range to determine the availability and location of suitable transplant sites. This can include areas for population expansion within rivers where the species presently exists.	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries, Region 5 - Ecological Services, Region 4 - Ecological Services	Work type not yet selected	Labor type not yet selected	
Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	3	2.2	Identify and select sites for transplants.	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority , Tennessee Wildlife Resources Agency , Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries	Work type not yet selected	Labor type not yet selected	
Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	3	2.3	Determine best method of establishing new populations	Not Started			Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries	Work type not yet selected	Labor type not yet selected	

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Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	3	2.4	Reestablish populations within historic range as needed to meet recovery	Not Started			Tennessee Valley Authority , Tennessee Wildlife Resources Agency , Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries	Work type not yet selected	Labor type not yet selected	
Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	3	2.5	Implement same protective measures for these reestablished populations as for known populations	Not Started			Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries, Region 5 - Ecological Services, Region 4 - Ecological Services, Tennessee and Virginia Nature Conservancy	Work type not yet selected	Labor type not yet selected	
Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	1	3	Conduct life history studies on a need- to-know basis	Not Started			Tennessee Valley Authority, Tennessee Wildlife Resources Agency, Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries	Work type not yet selected	Labor type not yet selected	These studies will be developed and carried out where there is a specific need for data necessary to reach recovery.

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Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	3	4	Determine the number of individuals required to maintain a viable population	Not Started			Tennessee Valley Authority , Tennessee Wildlife Resources Agency , Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries	Work type not yet selected	Labor type not yet selected	
Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	3	5	Investigate the need for habitat improvement and implement only where needed to meet recovery objective	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority , Tennessee Wildlife Resources Agency , Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries	Work type not yet selected	Labor type not yet selected	
Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	2	6	Develop and implement a monitoring program	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority , Tennessee Wildlife Resources Agency , Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries	Work type not yet selected	Labor type not yet selected	

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Appalachian monkeyface (pearlymussel) (Quadrula sparsa)	2	7	Annual assessment of recovery program and modify where needed	Ongoing Current	Prior to FY 1995		Tennessee Valley Authority , Tennessee Wildlife Resources Agency , Region 5, Endangered Species Program, Tennessee Heritage Program, Region 4, Endangered Species Program, Virginia Commission of Game and Inland Fisheries, Region 5 - Ecological Services, Region 4 - Ecological Services, Tennessee and Virginia Nature Conservancy	Work type not yet selected	Labor type not yet selected	